

Amendments to the claims

DT01 Rec'd PCT/PTC 16 DEC 2004

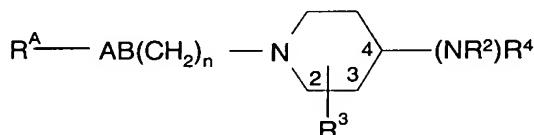
This listing of claims will replace all prior versions, and listings, of claims in the application:

**Claims**

**What is claimed is:**

Claims 1-16 (Cancelled).

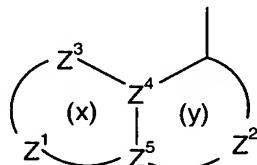
17. (New) A compound of formula (I) or a pharmaceutically acceptable derivative thereof:



(I)

wherein:

R<sup>A</sup> is an optionally substituted bicyclic carbocyclic or heterocyclic ring system of structure:



containing 0-3 heteroatoms in each ring in which:

at least one of rings (x) and (y) is aromatic;

one of Z<sup>4</sup> and Z<sup>5</sup> is C or N and the other is C;

Z<sup>3</sup> is N, NR<sup>13</sup>, O, S(O)<sub>x</sub>, CO, CR<sup>1</sup> or CR<sup>1</sup>R<sup>1a</sup>;

Z<sup>1</sup> and Z<sup>2</sup> are independently a 2 or 3 atom linker group each atom of which is independently selected from N, NR<sup>13</sup>, O, S(O)<sub>x</sub>, CO, CR<sup>1</sup> and CR<sup>1</sup>R<sup>1a</sup>;  
such that each ring is independently substituted with 0-3 groups R<sup>1</sup> and/or R<sup>1a</sup>;

one of Z<sup>1</sup>, Z<sup>2</sup>, Z<sup>3</sup>, Z<sup>4</sup> and Z<sup>5</sup> is N, one is CR<sup>1a</sup> and the remainder are CH, or one of Z<sup>1</sup>, Z<sup>2</sup>, Z<sup>3</sup>, Z<sup>4</sup> and Z<sup>5</sup> is CR<sup>1a</sup> and the remainder are CH;

R<sup>1</sup> and R<sup>1a</sup> are independently hydrogen; hydroxy; (C<sub>1-6</sub>)alkoxy optionally substituted by (C<sub>1-6</sub>)alkoxy, amino, piperidyl, guanidino or amidino any of which is optionally N-substituted by one or two (C<sub>1-6</sub>)alkyl, acyl or (C<sub>1-6</sub>)alkylsulphonyl groups, CONH<sub>2</sub>, hydroxy, (C<sub>1-6</sub>)alkylthio, heterocyclithio, heterocyclxy, arylthio,

aryloxy, acylthio, acyloxy or (C<sub>1</sub>-6)alkylsulphonyloxy; (C<sub>1</sub>-6)alkoxy-substituted(C<sub>1</sub>-6)alkyl; hydroxy (C<sub>1</sub>-6)alkyl; halogen; (C<sub>1</sub>-6)alkyl; (C<sub>1</sub>-6)alkylthio; trifluoromethyl; trifluoromethoxy; cyano; carboxy; nitro; azido; acyl; acyloxy; acylthio; (C<sub>1</sub>-6)alkylsulphonyl; (C<sub>1</sub>-6)alkylsulphoxide; arylsulphonyl; arylsulphoxide or an amino, piperidyl, guanidino or amidino group optionally N-substituted by one or two (C<sub>1</sub>-6)alkyl, acyl or (C<sub>1</sub>-6)alkylsulphonyl groups, or when Z<sup>3</sup> and the adjacent atom are CR<sup>1</sup> and CR<sup>1a</sup>, R<sup>1</sup> and R<sup>1a</sup> may together represent (C<sub>1</sub>-2)alkylenedioxy; provided that R<sup>1</sup> and R<sup>1a</sup>, on the same carbon atom are not both optionally substituted hydroxy or amino;

provided that

(i) when R<sup>A</sup> is optionally substituted quinolin-4-yl:

it is unsubstituted in the 6-position; or  
it is substituted by at least one hydroxy (C<sub>1</sub>-6)alkyl, cyano or carboxy group at the 2-, 5-, 6-, 7- or 8-position; or  
it is substituted by at least one trifluoromethoxy group; or  
R<sup>1</sup> and R<sup>1a</sup> together represent (C<sub>1</sub>-2)alkylenedioxy;

(ii) when R<sup>A</sup> is optionally substituted quinazolin-4-yl, cinnolin-4-yl, 1,5-naphthyridin-4-yl, 1,7-naphthyridin-4-yl or 1,8-naphthyridin-4-yl:

it is substituted by at least one hydroxy (C<sub>1</sub>-6)alkyl, cyano or carboxy group at the 2-, 5-, 6-, 7- or 8-position as available; or  
it is substituted by at least one trifluoromethoxy group; or  
R<sup>1</sup> and R<sup>1a</sup> together represent (C<sub>1</sub>-2)alkylenedioxy;

R<sup>2</sup> is hydrogen, or (C<sub>1</sub>-4)alkyl or (C<sub>2</sub>-4)alkenyl optionally substituted with 1 to 3 groups selected from:

amino optionally substituted by one or two (C<sub>1</sub>-4)alkyl groups; carboxy; (C<sub>1</sub>-4)alkoxycarbonyl; (C<sub>1</sub>-4)alkylcarbonyl; (C<sub>2</sub>-4)alkenyloxycarbonyl; (C<sub>2</sub>-4)alkenylcarbonyl; aminocarbonyl wherein the amino group is optionally substituted by hydroxy, (C<sub>1</sub>-4)alkyl, hydroxy(C<sub>1</sub>-4)alkyl, aminocarbonyl(C<sub>1</sub>-4)alkyl, (C<sub>2</sub>-4)alkenyl, (C<sub>1</sub>-4)alkylsulphonyl, trifluoromethylsulphonyl, (C<sub>2</sub>-4)alkenylsulphonyl, (C<sub>1</sub>-4)alkoxycarbonyl, (C<sub>1</sub>-4)alkylcarbonyl, (C<sub>2</sub>-4)alkenyloxycarbonyl or (C<sub>2</sub>-4)alkenylcarbonyl; cyano; tetrazolyl; 2-oxo-oxazolidinedione-5-yl; tetrazol-5-ylaminocarbonyl; 1,2,4-triazol-5-yl optionally substituted by R<sup>10</sup>; 3-hydroxy-3-cyclobutene-1,2-dione-4-yl; 2,4-thiazolidinedione-5-yl; tetrazol-5-ylaminocarbonyl; 1,2,4-triazol-5-yl optionally substituted by R<sup>10</sup>; 5-oxo-1,2,4-oxadiazol-3-yl; halogen; (C<sub>1</sub>-4)alkylthio; trifluoromethyl; hydroxy optionally substituted by (C<sub>1</sub>-4)alkyl, (C<sub>2</sub>-4)alkenyl, (C<sub>1</sub>-4)alkoxycarbonyl, (C<sub>1</sub>-4)alkylcarbonyl, (C<sub>2</sub>-4)alkenyloxycarbonyl, (C<sub>2</sub>-4)alkenylcarbonyl; oxo; (C<sub>1</sub>-4)alkylsulphonyl; (C<sub>2</sub>-

4) alkenylsulphonyl; or (C<sub>1</sub>-4)aminosulphonyl wherein the amino group is optionally substituted by (C<sub>1</sub>-4)alkyl or (C<sub>2</sub>-4)alkenyl;

R<sup>3</sup> is hydrogen; or

R<sup>3</sup> is in the 2-, 3- or 4-position and is:

trifluoromethyl; carboxy; (C<sub>1</sub>-6)alkoxycarbonyl; (C<sub>2</sub>-6)alkenyloxycarbonyl; aminocarbonyl wherein the amino group is optionally substituted by hydroxy, (C<sub>1</sub>-6)alkyl, hydroxy(C<sub>1</sub>-6)alkyl, aminocarbonyl(C<sub>1</sub>-6)alkyl, (C<sub>2</sub>-6)alkenyl, (C<sub>1</sub>-6)alkylsulphonyl, trifluoromethylsulphonyl, (C<sub>2</sub>-6)alkenylsulphonyl, (C<sub>1</sub>-6)alkoxycarbonyl, (C<sub>1</sub>-6)alkylcarbonyl, (C<sub>2</sub>-6)alkenyloxycarbonyl or (C<sub>2</sub>-6)alkenylcarbonyl and optionally further substituted by (C<sub>1</sub>-6)alkyl, hydroxy(C<sub>1</sub>-6)alkyl, aminocarbonyl(C<sub>1</sub>-6)alkyl or (C<sub>2</sub>-6)alkenyl; cyano; tetrazolyl; 2-oxo-oxazolidinyl optionally substituted by R<sup>10</sup>; 3-hydroxy-3-cyclobutene-1,2-dione-4-yl; 2,4-thiazolidinedione-5-yl; tetrazol-5-ylaminocarbonyl; 1,2,4-triazol-5-yl optionally substituted by R<sup>10</sup>; or 5-oxo-1,2,4-oxadiazol-3-yl; or (C<sub>1</sub>-4)alkyl or ethenyl optionally substituted with any of the substituents listed above for R<sup>3</sup> and/or 0 to 2 groups R<sup>12</sup> independently selected from:

halogen; (C<sub>1</sub>-6)alkylthio; trifluoromethyl; (C<sub>1</sub>-6)alkoxycarbonyl; (C<sub>1</sub>-6)alkylcarbonyl; (C<sub>2</sub>-6)alkenyloxycarbonyl; (C<sub>2</sub>-6)alkenylcarbonyl; hydroxy optionally substituted by (C<sub>1</sub>-6)alkyl, (C<sub>2</sub>-6)alkenyl, (C<sub>1</sub>-6)alkoxycarbonyl, (C<sub>1</sub>-6)alkylcarbonyl, (C<sub>2</sub>-6)alkenyloxycarbonyl, (C<sub>2</sub>-6)alkenylcarbonyl or aminocarbonyl wherein the amino group is optionally substituted by (C<sub>1</sub>-6)alkyl, (C<sub>2</sub>-6)alkenyl, (C<sub>1</sub>-6)alkylcarbonyl or (C<sub>2</sub>-6)alkenylcarbonyl; amino optionally mono- or disubstituted by (C<sub>1</sub>-6)alkoxycarbonyl, (C<sub>1</sub>-6)alkylcarbonyl, (C<sub>2</sub>-6)alkenyloxycarbonyl, (C<sub>2</sub>-6)alkenylcarbonyl, (C<sub>1</sub>-6)alkyl, (C<sub>2</sub>-6)alkenyl, (C<sub>1</sub>-6)alkylsulphonyl, (C<sub>2</sub>-6)alkenylsulphonyl or aminocarbonyl wherein the amino group is optionally substituted by (C<sub>1</sub>-6)alkyl or (C<sub>2</sub>-6)alkenyl; aminocarbonyl wherein the amino group is optionally substituted by (C<sub>1</sub>-6)alkyl, hydroxy(C<sub>1</sub>-6)alkyl, aminocarbonyl(C<sub>1</sub>-6)alkyl, (C<sub>2</sub>-6)alkenyl, (C<sub>1</sub>-6)alkoxycarbonyl, (C<sub>1</sub>-6)alkylcarbonyl, (C<sub>2</sub>-6)alkenyloxycarbonyl or (C<sub>2</sub>-6)alkenylcarbonyl and optionally further substituted by (C<sub>1</sub>-6)alkyl, hydroxy(C<sub>1</sub>-6)alkyl, aminocarbonyl(C<sub>1</sub>-6)alkyl or (C<sub>2</sub>-6)alkenyl; oxo; (C<sub>1</sub>-6)alkylsulphonyl; (C<sub>2</sub>-6)alkenylsulphonyl; or (C<sub>1</sub>-6)aminosulphonyl wherein the amino group is optionally substituted by (C<sub>1</sub>-6)alkyl or (C<sub>2</sub>-6)alkenyl; or

R<sup>3</sup> is in the 2-position and is oxo; or

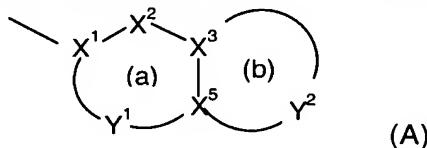
R<sup>3</sup> is in the 3-position and is fluorine, amino optionally substituted by a group selected from hydroxy, (C<sub>1</sub>-6)alkylsulphonyl, trifluoromethylsulphonyl, (C<sub>2</sub>-6)alkenylsulphonyl, (C<sub>1</sub>-6)alkylcarbonyl, (C<sub>2</sub>-6)alkenylcarbonyl, (C<sub>1</sub>-6)

6)alkoxycarbonyl, (C<sub>2</sub>-6)alkenyloxycarbonyl, (C<sub>1</sub>-6)alkyl and (C<sub>2</sub>-6)alkenyl, wherein a (C<sub>1</sub>-6)alkyl or (C<sub>2</sub>-6)alkenyl moiety may be optionally substituted with up to 2 groups R<sup>12</sup>, or hydroxy optionally substituted as described above for R<sup>12</sup> hydroxy; in addition when R<sup>3</sup> is disubstituted with a hydroxy or amino containing substituent and carboxy containing substituent these may together form a cyclic ester or amide linkage, respectively;

R<sup>4</sup> is a group -U-R<sup>5</sup> where

U is selected from CO, SO<sub>2</sub> and CH<sub>2</sub> and

R<sup>5</sup> is an optionally substituted bicyclic carbocyclic or heterocyclic ring system (A):



containing up to four heteroatoms in each ring in which

at least one of rings (a) and (b) is aromatic;

X<sup>1</sup> is C or N when part of an aromatic ring, or CR<sup>14</sup> when part of a non-aromatic ring;

X<sup>2</sup> is N, NR<sup>13</sup>, O, S(O)<sub>X</sub>, CO or CR<sup>14</sup> when part of an aromatic or non-aromatic ring or may in addition be CR<sup>14</sup>R<sup>15</sup> when part of a non aromatic ring;

X<sup>3</sup> and X<sup>5</sup> are independently N or C;

Y<sup>1</sup> is a 0 to 4 atom linker group each atom of which is independently selected from N, NR<sup>13</sup>, O, S(O)<sub>X</sub>, CO and CR<sup>14</sup> when part of an aromatic or non-aromatic ring or may additionally be CR<sup>14</sup>R<sup>15</sup> when part of a non aromatic ring;

Y<sup>2</sup> is a 2 to 6 atom linker group, each atom of Y<sup>2</sup> being independently selected from N, NR<sup>13</sup>, O, S(O)<sub>X</sub>, CO, CR<sup>14</sup> when part of an aromatic or non-aromatic ring or may additionally be CR<sup>14</sup>R<sup>15</sup> when part of a non aromatic ring;

each of R<sup>14</sup> and R<sup>15</sup> is independently selected from: H; (C<sub>1</sub>-4)alkylthio; halo; carboxy(C<sub>1</sub>-4)alkyl; halo(C<sub>1</sub>-4)alkoxy; halo(C<sub>1</sub>-4)alkyl; (C<sub>1</sub>-4)alkyl; (C<sub>2</sub>-4)alkenyl; (C<sub>1</sub>-4)alkoxycarbonyl; formyl; (C<sub>1</sub>-4)alkylcarbonyl; (C<sub>2</sub>-4)alkenyloxycarbonyl; (C<sub>2</sub>-4)alkenylcarbonyl; (C<sub>1</sub>-4)alkylcarbonyloxy; (C<sub>1</sub>-4)alkoxycarbonyl(C<sub>1</sub>-4)alkyl; hydroxy; hydroxy(C<sub>1</sub>-4)alkyl; mercapto(C<sub>1</sub>-4)alkyl; (C<sub>1</sub>-4)alkoxy; nitro; cyano; carboxy; amino or aminocarbonyl optionally substituted as for corresponding substituents in R<sup>3</sup>; (C<sub>1</sub>-4)alkylsulphonyl; (C<sub>2</sub>-4)alkenylsulphonyl; or aminosulphonyl wherein the amino group is optionally mono- or di-substituted by (C<sub>1</sub>-4)alkyl or (C<sub>2</sub>-4)alkenyl; aryl; aryl(C<sub>1</sub>-4)alkyl; aryl(C<sub>1</sub>-4)alkoxy or

R<sup>14</sup> and R<sup>15</sup> may together represent oxo;

each R<sup>13</sup> is independently H; trifluoromethyl; (C<sub>1</sub>-4)alkyl optionally substituted by hydroxy, (C<sub>1</sub>-6)alkoxy, (C<sub>1</sub>-6)alkylthio, halo or trifluoromethyl; (C<sub>2</sub>-4)alkenyl; aryl; aryl (C<sub>1</sub>-4)alkyl; arylcarbonyl; heteroarylcarbonyl; (C<sub>1</sub>-

4)alkoxycarbonyl; (C<sub>1</sub>-4)alkylcarbonyl; formyl; (C<sub>1</sub>-6)alkylsulphonyl; or aminocarbonyl wherein the amino group is optionally substituted by (C<sub>1</sub>-4)alkoxycarbonyl, (C<sub>1</sub>-4)alkylcarbonyl, (C<sub>2</sub>-4)alkenyloxycarbonyl, (C<sub>2</sub>-4)alkenylcarbonyl, (C<sub>1</sub>-4)alkyl or (C<sub>2</sub>-4)alkenyl and optionally further substituted by (C<sub>1</sub>-4)alkyl or (C<sub>2</sub>-4)alkenyl;

each x is independently 0, 1 or 2

n is 0 and AB is NR<sup>11</sup>CO, CO-CR<sup>8</sup>R<sup>9</sup>, CR<sup>6</sup>R<sup>7</sup>-CO, NHR<sup>11</sup>SO<sub>2</sub>, CR<sup>6</sup>R<sup>7</sup>-SO<sub>2</sub> or CR<sup>6</sup>R<sup>7</sup>-CR<sup>8</sup>R<sup>9</sup>, provided that R<sup>8</sup> and R<sup>9</sup> are not optionally substituted hydroxy or amino and R<sup>6</sup> and R<sup>8</sup> do not represent a bond:  
or n is 1 and AB is NR<sup>11</sup>CO, CO-CR<sup>8</sup>R<sup>9</sup>, CR<sup>6</sup>R<sup>7</sup>-CO, NR<sup>11</sup>SO<sub>2</sub>, CONR<sup>11</sup>, CR<sup>6</sup>R<sup>7</sup>-CR<sup>8</sup>R<sup>9</sup>, O-CR<sup>8</sup>R<sup>9</sup> or NR<sup>11</sup>-CR<sup>8</sup>R<sup>9</sup>;

provided that R<sup>6</sup> and R<sup>7</sup>, and R<sup>8</sup> and R<sup>9</sup> are not both optionally substituted hydroxy or amino;

and wherein:

each of R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> and R<sup>9</sup> is independently selected from: H; (C<sub>1</sub>-6)alkoxy; (C<sub>1</sub>-6)alkylthio; halo; trifluoromethyl; azido; (C<sub>1</sub>-6)alkyl; (C<sub>2</sub>-6)alkenyl; (C<sub>1</sub>-6)alkoxycarbonyl; (C<sub>1</sub>-6)alkylcarbonyl; (C<sub>2</sub>-6)alkenyloxycarbonyl; (C<sub>2</sub>-6)alkenylcarbonyl; hydroxy, amino or aminocarbonyl optionally substituted as for corresponding substituents in R<sup>3</sup>; (C<sub>1</sub>-6)alkylsulphonyl; (C<sub>2</sub>-6)alkenylsulphonyl; or (C<sub>1</sub>-6)aminosulphonyl wherein the amino group is optionally substituted by (C<sub>1</sub>-6)alkyl or (C<sub>2</sub>-6)alkenyl;

or R<sup>6</sup> and R<sup>8</sup> together represent a bond and R<sup>7</sup> and R<sup>9</sup> are as above defined;

R<sup>10</sup> is selected from (C<sub>1</sub>-4)alkyl; (C<sub>2</sub>-4)alkenyl and aryl any of which may be optionally substituted by a group R<sup>12</sup> as defined above; carboxy; aminocarbonyl wherein the amino group is optionally substituted by hydroxy, (C<sub>1</sub>-6)alkyl, (C<sub>2</sub>-6)alkenyl, (C<sub>1</sub>-6)alkylsulphonyl, trifluoromethylsulphonyl, (C<sub>2</sub>-6)alkenylsulphonyl, (C<sub>1</sub>-6)alkoxycarbonyl, (C<sub>1</sub>-6)alkylcarbonyl, (C<sub>2</sub>-6)alkenyloxycarbonyl or (C<sub>2</sub>-6)alkenylcarbonyl and optionally further substituted by (C<sub>1</sub>-6)alkyl or (C<sub>2</sub>-6)alkenyl; and

R<sup>11</sup> is hydrogen; trifluoromethyl, (C<sub>1</sub>-6)alkyl; (C<sub>2</sub>-6)alkenyl; (C<sub>1</sub>-6)alkoxycarbonyl; (C<sub>1</sub>-6)alkylcarbonyl; or aminocarbonyl wherein the amino group is optionally substituted by (C<sub>1</sub>-6)alkoxycarbonyl, (C<sub>1</sub>-6)alkylcarbonyl, (C<sub>2</sub>-6)alkenyloxycarbonyl, (C<sub>2</sub>-6)alkenylcarbonyl, (C<sub>1</sub>-6)alkyl or (C<sub>2</sub>-6)alkenyl and optionally further substituted by (C<sub>1</sub>-6)alkyl or (C<sub>2</sub>-6)alkenyl;

or where one of R<sup>3</sup> and R<sup>6</sup>, R<sup>7</sup>, R<sup>8</sup> or R<sup>9</sup> contains a carboxy group and the other contains a hydroxy or amino group they may together form a cyclic ester or amide linkage.

18. (New) A compound according to claim 17 wherein R<sup>A</sup> is optionally substituted isoquinolin-5-yl, quinolin-8-yl, thieno[3,2-b]pyridin-7-yl, 2,3-dihydro-[1,4]dioxino[2,3-b]pyridin-8-yl, quinoxalin-5-yl, isoquinolin-8-yl, [1,6]-naphthyridin-4-yl, 1,2,3,4-tetrahydroquinoxalin-5-yl or 1,2-dihydroisoquinoline-8-yl..

19. (New) A compound according to claim 17 wherein R<sup>1</sup> is H, methoxy, methyl, cyano or halogen and R<sup>1a</sup> is H.

20. (New) A compound according to claim 17 wherein R<sup>3</sup> is hydrogen; optionally substituted hydroxy; optionally substituted amino; halogen; (C<sub>1-4</sub>)alkoxycarbonyl; CONH<sub>2</sub>; 1-hydroxyalkyl; CH<sub>2</sub>CO<sub>2</sub>H; CH<sub>2</sub>CONH<sub>2</sub>; -CONHCH<sub>2</sub>CONH<sub>2</sub>; 1,2-dihydroxyalkyl; CH<sub>2</sub>CN; 2-oxo-oxazolidin-5-yl; or 2-oxo-oxazolidin-5-yl(C<sub>1-4</sub>alkyl).

21. (New) A compound according to claim 17 wherein n is 0 and A and B are both CH<sub>2</sub>, A is CHO and B is CH<sub>2</sub> or A is NH and B is CO.

22. (New) A compound according to claim 17 wherein -U- is -CH<sub>2</sub>-.

23. (New) A compound according to claim 17 wherein the heterocyclic ring (A) having 8-11 ring atoms including 2-4 heteroatoms of which at least one is N or NR<sup>13</sup> in which Y<sup>2</sup> contains 2-3 heteroatoms, one of which is S and 1-2 are N, with one N bonded to X<sup>3</sup> or the heterocyclic ring (A) has ring (a) aromatic selected from optionally substituted benzo and pyrido and ring (b) non aromatic and Y<sup>2</sup> has 3-5 atoms, including a heteroatom bonded to X<sup>5</sup> selected from O, S or NR<sup>13</sup>, where R<sup>13</sup> is other than hydrogen, and NHCO bonded via N to X<sup>3</sup>, or O bonded to X<sup>3</sup>.

24. (New) A compound according to claim 17 wherein R<sup>5</sup> is selected from:  
3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-yl  
3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-yl  
7-chloro-3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-yl  
7-fluoro-3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-yl  
2,3-dihydro-[1,4]dioxino[2,3-c]pyridin-7-yl.

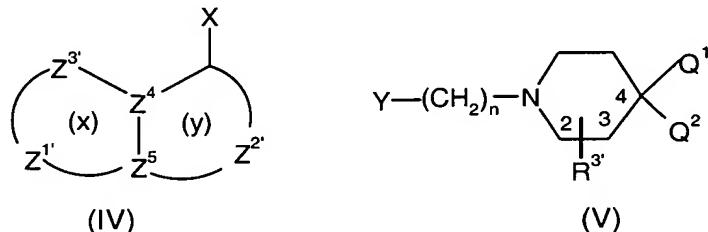
25. (New) A compound according to claim 17 selected from:

4-(2-{4-[(3-Oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-ylmethyl)-amino]-piperidin-1-yl}-ethyl)-quinoline-6-carbonitrile 6-((3R,4S)-3-Fluoro-1-[(R)-2-hydroxy-2-(2-methoxy-quinolin-8-yl)-ethyl]-piperidin-4-ylamino)-methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one  
6-((3S,4R)-3-Fluoro-1-[(R)-2-hydroxy-2-(2-methoxy-quinolin-8-yl)-ethyl]-piperidin-4-ylamino)-methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one  
6-((3R,4R)-3-Hydroxy-1-[(R)-2-hydroxy-2-(2-methoxy-quinolin-8-yl)-ethyl]-piperidin-4-ylamino)-methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one  
6-((3S,4S)-3-Hydroxy-1-[(R)-2-hydroxy-2-(2-methoxy-quinolin-8-yl)-ethyl]-piperidin-4-ylamino)-methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one  
6-((3R,4S)-1-[2-(2,3-Dihydro-[1,4]dioxino[2,3-f]quinolin-10-yl)-ethyl]-3-fluoro-piperidin-4-ylamino)-methyl)-4H-pyrido[3,2-b][1,4]thiazin-3-one  
6-[(1-((2R/S)-2-hydroxy-2-[3-(methyloxy)-5-quinoxaliny]ethyl)-4-piperidinyl)amino]methyl}-2H-pyrido[3,2-b][1,4]thiazin-3(4H)-one  
(1R/S)-2-{4-[(2,3-dihydro[1,4]dioxino[2,3-c]pyridin-7-ylmethyl)amino]-1-piperidinyl}-1-[3-(methyloxy)-5-quinoxaliny]ethanol  
{1-[2-(9-Chloro-2,3-dihydro-[1,4]dioxino[2,3-f]quinolin-10-yl)-ethyl]-piperidin-4-yl}-  
(2,3-dihydro-[1,4]dioxino[2,3-c]pyridin-7-ylmethyl)-amine 6-[(1-{2-hydroxy-2-[2-(methyloxy)-8-quinoliny]ethyl}-4-piperidinyl)amino]methyl}-2H-pyrido[3,2-b][1,4]oxazin-3(4H)-one  
6-[(1-[2-(4-quinoliny)ethyl]-4-piperidinyl)amino]methyl]-2H-pyrido[3,2-b][1,4]thiazin-3(4H)-one  
4-[2-(3-hydroxy-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-yl)methyl]amino)-1-piperidinyl]ethyl]-6-quinolinecarbonitrile (isomer E2)  
4-[2-(3-hydroxy-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-yl)methyl]amino)-1-piperidinyl]ethyl]-6-quinolinecarbonitrile (isomer E2)  
4-[2-(3-hydroxy-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]oxazin-6-yl)methyl]amino)-1-piperidinyl]ethyl]-6-quinolinecarbonitrile (E1 isomer)  
4-[2-(3-hydroxy-4-[(3-oxo-3,4-dihydro-2H-pyrido[3,2-b][1,4]thiazin-6-yl)methyl]amino)-1-piperidinyl]ethyl]-6-quinolinecarbonitrile (E1 isomer)  
or a pharmaceutically acceptable derivative thereof.

26. (New) A method of treatment of bacterial infections in mammals, particularly in man, which method comprises the administration to a mammal in need of such treatment an effective amount of a compound according to claim 17.

27. (New) A pharmaceutical composition comprising a compound according to claim 17, and a pharmaceutically acceptable carrier.

28. (New) A process for preparing a compound of formula (I) according to claim 17, or a pharmaceutically acceptable derivative thereof, which process comprises reacting a compound of formula (IV) with a compound of formula (V):



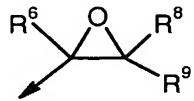
wherein n is as defined in formula (I);  $Z^{1'}$ ,  $Z^{2'}$ ,  $Z^{3'}$ ,  $R^{1'}$ , and  $R^{3'}$  are  $Z^1$ ,  $Z^2$ ,  $Z^3$ ,  $R^1$ , and  $R^3$  as defined in formula (I) or groups convertible thereto;  $Z^4$  and  $Z^5$  are as defined in formula (I);

$Q^1$  is  $NR^{2'}R^{4'}$  or a group convertible thereto wherein  $R^{2'}$  and  $R^{4'}$  are  $R^2$  and  $R^4$  as defined in formula (I) or groups convertible thereto and  $Q^2$  is H or  $R^{3'}$  or  $Q^1$  and  $Q^2$  together form an optionally protected oxo group;

- (i)  $X$  is  $A'$ -COW,  $Y$  is H and  $n$  is 0;
- (ii)  $X$  is  $CR^6=CR^8R^9$ ,  $Y$  is H and  $n$  is 0;
- (iii)  $X$  is oxirane,  $Y$  is H and  $n$  is 0;
- (iv)  $X$  is  $N=C=O$  and  $Y$  is H and  $n$  is 0;
- (v) one of  $X$  and  $Y$  is  $CO_2R^Y$  and the other is  $CH_2CO_2R^X$ ;
- (vi)  $X$  is  $CHR^6R^7$  and  $Y$  is  $C(=O)R^9$ ;
- (vii)  $X$  is  $CR^7=PR^Z_3$  and  $Y$  is  $C(=O)R^9$  and  $n=1$ ;
- (viii)  $X$  is  $C(=O)R^7$  and  $Y$  is  $CR^9=PR^Z_3$  and  $n=1$ ;
- (ix)  $Y$  is COW and  $X$  is  $NHR^{11'}$ ,  $NCO$  or  $NR^{11'}COW$  and  $n=0$  or 1 or when  $n=1$   $X$  is COW and  $Y$  is  $NHR^{11'}$ ,  $NCO$  or  $NR^{11'}COW$ ;
- (x)  $X$  is  $NHR^{11'}$  and  $Y$  is  $C(=O)R^8$  and  $n=1$ ;
- (xi)  $X$  is  $NHR^{11'}$  and  $Y$  is  $CR^8R^9W$  and  $n=1$ ;
- (xii)  $X$  is  $NR^{11'}COCH_2W$  or  $NR^{11'}SO_2CH_2W$  and  $Y$  is H and  $n=0$ ;
- (xiii)  $X$  is  $CR^6R^7SO_2W$  and  $Y$  is H and  $n=0$ ;
- (xiv)  $X$  is W or OH and  $Y$  is  $CH_2OH$  and  $n$  is 1;
- (xv)  $X$  is  $NHR^{11'}$  and  $Y$  is  $SO_2W$  or  $X$  is  $NR^{11'}SO_2W$  and  $Y$  is H, and  $n$  is 0;
- (xvi)  $X$  is W and  $Y$  is  $CONHR^{11'}$ ;
- (xvii)  $X$  is  $-CH=CH_2$  and  $Y$  is H and  $n=0$ ;

in which  $W$  is a leaving group, e.g. halo, methanesulphonyloxy, trifluoromethanesulphonyloxy or imidazolyl;  $R^X$  and  $R^Y$  are (C<sub>1-6</sub>)alkyl;  $R^Z$  is aryl or

(C<sub>1-6</sub>)alkyl; A' and NR<sup>11'</sup> are A and NR<sup>11</sup> as defined in formula (I), or groups convertible thereto; and oxirane is:



wherein R<sup>6</sup>, R<sup>8</sup> and R<sup>9</sup> are as defined in formula (I);  
and thereafter optionally or as necessary converting Q<sup>1</sup> and Q<sup>2</sup> to NR<sup>2'</sup>R<sup>4'</sup>;  
converting A', Z<sup>1'</sup>, Z<sup>2'</sup>, Z<sup>3'</sup>, R<sup>1'</sup>, R<sup>2'</sup>, R<sup>3'</sup>, R<sup>4'</sup> and NR<sup>11'</sup> to A, Z<sup>1</sup>, Z<sup>2</sup>, Z<sup>3</sup>, R<sup>1</sup>, R<sup>2</sup>,  
R<sup>3</sup>, R<sup>4</sup> and NR<sup>11</sup>; converting A-B to other A-B, interconverting R<sup>1</sup>, R<sup>2</sup>, R<sup>3</sup> and/or  
R<sup>4</sup>, and/or forming a pharmaceutically acceptable derivative thereof.